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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/092,095

03/06/2002

Brian Bates

8627-051

8504

7590

07/09/2008

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EXAMINER

SEVERSON, RYAN J

ART UNIT

PAPER NUMBER

3731

NOTIFICATION DATE

DELIVERY MODE

07/09/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/092,095	BATES, BRIAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ryan Severson	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 40-47, 49, 50 and 73-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-47, 49, 50 and 73-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09 May 2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 40-47, 49, 50, and 73-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Summers (6,080,191) in view of Shull et al. (6,143,022), Lee (5,123,917), and McCrory (5,951,599).** Summers discloses several stent patterns (see figures 1-5 and 21). The embodiment of the stent in figures 1-5 is formed from a single wire (column 3, line 65), has ring segments joined by curved regions, and adjacent rings are interleaved. The embodiment in figure 21 has a longitudinal support and is formed from a flat sheet of material. Summers states that a graft material may be attached to any of the disclosed stent frames to seal an aneurysm (column 11, lines 25-52), but Summers fails to disclose the specific means of attaching the graft to the stent frame.

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4. Attention is drawn to Shull reference, which teaches attaching a graft to a stent by folding the ends of the graft over the ends of the stent (see figures 2, 6, and 7) to provide a more secure connection between the stent and graft. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have disposed a graft with folded ends over the stent of Summers, as taught by Shull reference, to provide a more secure connection between the stent and graft. The graft that is folded into the interior of the stent extends only a partial length of the stent.

5. The combination of Summers and Shull references as set forth above fails to disclose the layers of the graft (in the folded portion) are affixed to one another and not to the stent. Attention is drawn to Lee reference, which teaches layers of a graft may be bonded to one another without affixing to the stent (see column 5, lines 27-31) to prevent the graft from slipping off the stent. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have bonded the double layers of graft of the combination of Summers and Shull references, as taught by Lee reference, to prevent the graft from slipping off the stent.

6. The combination of Summers, Shull, and Lee references as set forth above does not disclose the graft material only covers a portion of the stent circumference.

Attention is drawn to McCrory reference, which teaches a graft can extend only a partial circumference to be intended to treat an aneurysm. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the graft of the combination extend only about 1/4<sup>th</sup> of the circumference of the stent, as taught by McCrory reference, to allow the graft to seal an aneurysm from the vessel.

7. Regarding claim 73, Examiner contends suturing the layers of graft material together would be an obvious alternative to the bonding/adhesive taught by Lee reference.

8. Regarding claims 76, 77, 82, 83, and 88-90, the combination of Summers, Shull, Lee, and McCrory as set forth above fails to disclose radiopaque markers on the stent. Attention is drawn back to Shull reference, which teaches radiopaque markers can be used on a stent (see column 8, lines 52-55) to allow for proper positioning of the stent at the intended treatment site. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included radiopaque markers on the stent-graft of the combination of Summers, Shull, Lee, and McCrory references to allow for proper positioning of the stent at the intended treatment site.

9. Further regarding claims 76, 77, 82, 83, and 88-90, the combination does not disclose the specific location/orientation of the radiopaque markers. However, Examiner contends the placement of the radiopaque markers would have been obvious to try to one of ordinary skill in the art because the location of markers would be used to determine the orientation of the graft (which, as set forth above, only extends a partial circumference of the stent). Since this orientation would be required to, for example, seal an aneurysm, it would have been obvious to locate the markers as claimed to allow proper positioning of the stent and graft relative to the aneurysm.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 40, 78, 84, and 90 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Severson whose telephone number is (571)272-3142. The examiner can normally be reached on Monday - Friday 8:30-5:00.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. S./  
Examiner, Art Unit 3731

/Todd E Manahan/  
Supervisory Patent Examiner, Art Unit 3731